



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,543	12/19/2005	Katsuhiko Kyuken	0951-0177PUS1	9378
2252	7590	10/27/2010		
BIRCH STEWART KOLASCH & BIRCH			EXAMINER	
PO BOX 747			MORRISON, THOMAS A	
FALLS CHURCH, VA 22040-0747			ART UNIT	PAPER NUMBER
			3653	
NOTIFICATION DATE	DELIVERY MODE			
10/27/2010	ELECTRONIC			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/561,543	<b>Applicant(s)</b> KYUKEN ET AL.
	<b>Examiner</b> THOMAS A. MORRISON	<b>Art Unit</b> 3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 13 August 2010.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 5,6,9,10 and 14 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 5,6 and 14 is/are rejected.

7) Claim(s) 9 and 10 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/13/2010 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,554,275 (Tranquilla) (hereinafter "Tranquilla") in view of U.S. Patent No. 6,731,393 Currans et al.) (hereinafter "Currans").

Regarding claim 14, Figs. 3-4 of Tranquilla disclose an original reading method comprising:

transporting a first original document (24) with an original transport mechanism (including 14),

reading an image of the transported original document (24) with an original reading mechanism (col. 5, lines 50-60),

detecting (via 72 and 70), during the transporting, a leading edge of another original (26) while the first original document (24) is illuminated, where detecting (via 72 and 70) includes determining relative positions of the first and other original documents (24 and 26) by detecting with a reading mechanism (including 72 and 70) whether or not a leading edge of the other document (26) obscures at least part of the first document (24).

Regarding the recitation "stopping the reading operation of the first original document, deleting the read image, and altering said reading operation to read an image of the other original document **if the other original document is positioned between the first original document and the reading portion of the original reading mechanism**", the bolded portion of this recitation includes "conditional limitations" that need not ever occur. For example, if the other original document is never positioned between the first original document and the reading portion of the original reading mechanism, there is no requirement whatsoever for stopping the reading operation of the first original document, deleting the read image, and altering the reading operation as claimed. Since the above-noted recitation includes "conditional limitations" that need not ever occur, this recitation does not distinguish claim 14 from the prior art apparatus of Tranquilla. Tranquilla meets most of the limitations of claim 14, including reading an image of the transported original document (24) with an original reading mechanism (col. 5, lines 50-60), but Tranquilla does not disclose that the same reading mechanism is also used to detect whether or not a

leading edge of the other document obscures at least part of the first document, as set forth in claim 14.

Currans discloses that it is well known in the art to provide an original reading apparatus (Figs. 22(A) and 22(B)) with a reading mechanism for the purpose of capturing images and also detecting the condition of sheets that are being fed, e.g., any type of jam or miss-feed condition. See, e.g., Figs. 22(A)-22(B) and col. 20, lines 17-30 of Currans. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the same reading mechanism, as taught by Tranquilla, to capture the image of the original document and also detect whether or not a leading edge of the other document obscures at least part of the first document (e.g., a feeding condition of the sheets being fed), because this use of a single reading mechanism to perform both functions eliminates the need for separate inspection and image reading sections and simplifies the overall device. Thus, all of the limitations of independent claim 14 are rendered obvious by the cited combination of references.

3. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tranquilla in view of U.S. Patent Publication No. 2003/0090050 (Sueoka) (hereinafter "Sueoka"), and further in view of U.S. Patent No. 6,731,393 Currans et al.) (hereinafter "Currans").

Regarding independent claim 5, Figs. 3-4 of Tranquilla show an original reading apparatus comprising:

an original transport mechanism (including 14), the mechanism having a movable member (14) that transports an original document placed on a document placement stage (Fig. 4), and

an original reading mechanism (col. 5, lines 50-60),

wherein the moveable member (14) transports a first original document (78) by making contact with the first original document (78) and delivers it to the reading mechanism (col. 5, lines 50-60) by transmitting its movement to the first original document (78) via frictional force in a manner such that upon detection, by an optical sensor (70 and 72), of a leading edge of another original document (80) while the first original document (78) is illuminated,

the original reading mechanism stops the reading operation of the first original document and deletes the read image, and the reading operation of the image of the other original document by the original reading mechanism proceeds if the other original document is positioned between the first original document and a reading portion of the original reading mechanism.

Regarding the recitation "**in a manner such that upon detection, by the optical sensor, of a leading edge of another original document while the first original document is illuminated, the original reading mechanism stops the reading operation of the first original document and deletes the read image, and the reading operation of the image of the other original document by the original reading mechanism proceeds if the other original document is positioned between the first original document and a reading portion of the original reading**

mechanism", this recitation includes "conditional limitations" that need not ever occur. For example, *if* the other original document is never positioned between the first original document and the reading portion of the original reading mechanism, there is no requirement whatsoever for the original reading mechanism to function as claimed. Since the above-noted recitation includes "conditional limitations" that need not ever occur, this recitation does not distinguish claim 5 from the prior art apparatus of Tranquilla.

Tranquilla meets most of the limitation of claim 5, including an original reading mechanism (col. 5, lines 50-60), but Tranquilla does not explicitly disclose that such original reading mechanism (col. 5, lines 50-60) has a light source, an optical sensor and an optical system as claimed. Also, Tranquilla does not explicitly disclose that the same original reading mechanism is also used to detect a leading edge of another original document while the first original document is illuminated, as now set forth in claim 5.

Sueoka provides a general teaching that it is well known in the art to provide an original reading apparatus with an original reading mechanism (including 121 and 131-133) that includes a light source (132) that illuminates an original, an optical sensor (121), and an optical system (including 131 and 133) that guides light reflected from the original illuminated by the light source (132) to the optical sensor (121), and that captures an image of the original transported by the original transport mechanism (including 131 and 133), for the purpose of reading the image surface of a sheet-shaped document. See, e.g., numbered paragraph [0038] of Suioka. It would have been

obvious to one of ordinary skill in the art at the time the invention was made to provide the apparatus of Tranquilla with an original reading mechanism that has a light source, an optical sensor and an optical system for the purpose of reading the image surface of a sheet-shaped document, as taught by Sueoka.

Tranquilla in view of Sueoka discloses all of the limitations, except for the fact that this combination teaches one optical sensor for detecting a leading edge of another original document while the first original document is illuminated (e.g., a miss-feed) and another optical sensor for reading images in an original reading device. However, Currans discloses that it is well known in the art to provide an original reading apparatus (Figs. 22(A) and 22(B)) with an optical sensor for the purpose of capturing images and also detecting miss-feeds. See, e.g., Figs. 22(A)-22(B) and col. 20, lines 17-30 of Currans. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the same optical sensor in the original reading mechanism, as taught by Sueoka, to capture the image of the original document and also detect a leading edge of another original document while the first original document is still illuminated (a type of miss-feed), because this use of a single optical sensor device to perform both functions eliminates the need for separate inspection and image reading sections and simplifies the overall device. Thus, all of the limitations of independent claim 5 are met by the cited combination of references.

Regarding dependent claim 6, Figs. 3-4 of Tranquilla show that the original transport mechanism (including 14) includes a structure having a plurality of document pages that have been placed on the document placement stage (Fig. 4) face upward

such that the moveable member (14) supplies and transports the document pages page by page beginning with the bottom page.

***Response to Arguments***

4. Applicant's arguments filed 7/13/2010 have been fully considered but they are not persuasive.

With regard to claims 5 and 14, as now amended, not the exact same limitations from the previously presented claim 8 were added into these claims. As such, the examiner was able to reject claims 5 and 14 as outlined above. The rejection of dependent claim 6 is also outlined above. It appears that applicant can positively claim all of the recitations and overcome the art of record, e.g., by changing "if" to either "based on" or "according to". As one example, claim 14 can be amended to recite something such as "stopping the reading operation of the first original document, deleting the read image, and altering said reading operation to read an image of the other original document [[if]] based on the other original document [[is]] being positioned between the first original document and the reading portion of the original reading mechanism." Alternatively, claim 14 can be amended to recite something such as "stopping the reading operation of the first original document, deleting the read image, and altering said reading operation to read an image of the other original document [[if]] according to the other original document [[is]] being positioned between the first original document and the reading portion of the original reading mechanism." As yet another alternative, applicant can recite both possible outcomes, e.g., if the other original document **is** positioned between the first original document and

Art Unit: 3653

the reading portion of the original reading mechanism then..., and if the other original document **is not** positioned between the first original document and the reading portion of the original reading mechanism then... These are just a few examples, and there are many other ways to positively recite limitations in the claims.

***Allowable Subject Matter***

5. Claim 9-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS A. MORRISON whose telephone number is (571)272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stefano Karmis can be reached on (571) 272-6744. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10/18/2010

/Stefano Karmis/  
Supervisory Patent Examiner, Art Unit 3653